

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BOARD OF PATENT APPEALS AND INTERFERENCES

In Re the Application of:) Attorney Docket No.: 30011.24987
DANIEL P. GORDON, et al.)
Serial No.: 10/799,117) Art Unit: 3636
Filed: March 12, 2004)
For: SELF-CONTAINED AIR LIFTED SEAT) Examiner: Shirene Willis Brantley

APPARATUS

CERTIFICATE OF TRANSMISSION

I hereby certify that this **APPEAL BRIEF** is filed via electronic deposit to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Date: October 12, 2009 By: DM Kempthorn

APPEAL BRIEF

Sir:

This appeal brief is in response to the final rejection of claims 1-10, which was mailed May 14, 2007. On August 24, 2009, a notice of non-compliant appeal brief was forwarded to the applicant, who has made the suggested modifications, and now re-submits the appeal brief for consideration. Furthermore, the Commissioner is hereby authorized to charge deposit account 50-4538 for a one month extension of time and any other necessary fees, or to credit any overages or refunds thereto. Please refer to Attorney Docket No. 30011.24987 when charging or crediting this account.

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I. REAL PARTY IN INTEREST

The subject application has been assigned by co-inventors Daniel P. Guyton and Douglas Evans to Akron General Development Foundation. Accordingly, Akron General Development Foundation is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are currently no related appeals or interferences pending.

III. STATUS OF THE CLAIMS

Claims 1-10 are pending in this application, are under final rejection, and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

Subsequent to the Examiner's Final Rejection of 5/14/07, Applicant filed arguments on 7/16/07 requesting reconsideration of the Examiner's previous rejections.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Claim 1

The invention claimed in independent claim 1 comprises a device for assisting an individual in the act of sitting in and/or rising from a seat, which device is referred to as an “airlift seat apparatus.” See Specification, Page 5, Lines 19-20. A drawing of the device is shown in Figure 1 of the published application. The device includes a base member 10 to which a bladder 14 is attached and supported. See Specification, Page 5, Line 20. The bladder 14 has a generally trapezoidal profile when fully inflated, and can be collapsed into a generally flat configuration when deflated. See Specification, Page 6, Lines 2-4. An individual seated on a deflated bladder can actuate a “rechargeable self-contained air compressor” 20 to inflate the bladder 14 through valve 16. See Specification, Page 6, Line 22-23; and Specification, Page 7, Lines 26-29. As the bladder 14 inflates the front portion 40 and rear portion 42 rise simultaneously, thus keeping the individual in a level but elevated seated position. See Specification, Page 7, Lines ¶ 32, line 26-29. However, as the bladder 14 continues to inflate the front portion 40 becomes fully extended and thus cannot rise further, but the rear portion 42 continues to rise. See Id. Thus, the individual’s weight is shifted forward thereby assisting the individual into a standing position.

Conversely, a standing individual can shift his weight rearward and against an inflated bladder 14, and actuate a valve for deflation of the bladder. See Specification, Page 8, Lines 8-12. Thus as the bladder 14 deflates the rear portion 42 drops to the level of the front portion 40 and the individual’s weight shifts rearward toward the seat. See Id. As the bladder 14 continues to deflate the rear portion 42 and front portion 40 descend together thereby maintaining the individual in a level seated position. See Id. Finally, when the bladder 14 is fully deflated the individual is in a final seated position. See Id.

Claim 1 also includes a compartment 18 adapted to contain the compressor 20, a hose for delivering air from the compressor 20 to the bladder 14, and a cover 22. See Specification, Page 5, Lines 21-22; and Specification, Page 6, Line 20. The subject matter of independent claims 1 and 6 differ only in that claim 6 is drawn to separate inflation 60 and deflation 62 valves. See Specification, Page 7, Line 17.

Claim 2

Claim 2 depends from claim 1 and explicitly adds that “the front portion [40] initially rises in unison with the rear portion [42].” See Specification, Page 7, Lines 1-2.

Claim 3

Claim 3 depends from claim 1 and adds that “the rear portion [42] is approximately 7 inches higher than the front portion [40] at full inflation.” See Specification, Page 3, Lines 27-28.

Claim 4

Claim 4 depends from claim 1 and adds that “the cover [22] comprises a selectively removable connecting means [27] so that the cover [22] may be removed from the base [12] and the bladder [14].” See Specification, Page 5, Lines 28-29, Page 6, Lines 1-8. Furthermore, the “connecting means” can be snaps, hook and loop fasteners, Velcro®, zippers or equivalents thereof. See Id.

Claim 5

Claim 5 depends from claim 1 and adds that “the top of the cover [22] further contains material [38] to minimize slippage.” See Specification, Page 6, Lines 4-6; and Figure 2, element 38.

Claim 6

The invention claimed in independent claim 6 comprises a device for assisting an individual in the act of sitting in and/or rising from a seat, which device is referred to as an “airlift seat apparatus.” See Specification, Page 5, Lines 19-20. A drawing of the device is shown in Figure 1 of the published application. The device includes a base member 10 to which a bladder 14 is attached and supported. See Specification, Page 5, Line 20. The bladder 14 has a generally trapezoidal profile when fully inflated, and can be collapsed into a generally flat configuration when deflated. See Specification, Page 7, Lines 2-4. An individual seated on a deflated bladder can actuate a “rechargeable self-contained air compressor” 20 to inflate the bladder 14 through a first valve 60. See Specification, Page 5, Line 21; Page 7, Line 17; and Specification, Page 7, Lines 26-28. As the bladder 14 inflates the front portion 40 and rear portion 42 rise simultaneously, thus keeping the individual in a level but elevated seated

position. See Specification, Page 7, Lines 26-28. However, as the bladder 14 continues to inflate the front portion 40 becomes fully extended and thus cannot rise further, but the rear portion 42 continues to rise. See Id. Thus, the individual's weight is shifted forward thereby assisting the individual into a standing position.

Conversely, a standing individual can shift his weight rearward and against an inflated bladder 14, and actuate a valve 62 for deflation of the bladder. See Specification, Page 7, Lines 18-19; and Specification, Page 8, Lines 8-12. Thus, as the bladder 14 deflates, the rear portion 42 drops to the level of the front portion 40 and the individual's weight shifts rearward toward the seat. See Id. As the bladder 14 continues to deflate, the rear portion 42 and front portion 40 descend together, thereby maintaining the individual in a level seated position. See Id. Finally, when the bladder 14 is fully deflated the individual is in a final seated position. See Id.

Claim 6 also includes a compartment 18 adapted to contain the compressor 20, a hose for delivering air from the compressor 20 to the bladder 14, and a cover 22. See Specification, Page 5, Line 21; and Specification, Page 6, Lines 19-20. The subject matter of independent claims 1 and 6 differ only in that claim 6 is drawn to separate inflation 60 and deflation 62 valves. See Specification, Page 7, Lines 15-16.

Claim 7

Claim 7 depends from claim 6 and explicitly adds that "the front portion [40] initially rises in unison with the rear portion [42]." See Specification, Page 7, Lines 1-2.

Claim 8

Claim 8 depends from claim 6 and adds that "the rear portion [42] is approximately 7 inches higher than the front portion [40] at full inflation." See Specification, Page 3, Lines 27-28.

Claim 9

Claim 9 depends from claim 6 and adds that “the cover [22] comprises a selectively removable connecting means [27] so that the cover [22] may be removed from the base [12] and the bladder [14].” See Specification, Page 5, Lines 21-28, and Page 6, Lines 1-8. Furthermore, the “connecting means” can be snaps, hook and loop fasteners, Velcro®, zippers or equivalents thereof. See Id.

Claim 10

Claim 10 depends from claim 6 and adds that “the top of the cover [22] further contains material [38] to minimize slippage.” See Specification, Page 6, Lines 4-6; and Figure 2, element 38.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Referring now to the Office Action mailed on May 14, 2007, the Examiner has rejected claims 1-3 and 6-8 under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 5,361,433 to Vanzant in view of US Patent No. 6,113,188 to Stewart et al. The Examiner has also rejected claims 4, 5, 9, and 10 under 35 U.S.C. §103(a) as being unpatentable over Vanzant in view of Stewart as applied to claims 1-3 and 6-8 and in further view of US Patent No. 6,264,279 to Chow.

VII. ARGUMENT

Claims Grouping:

Claims 1-3 and 6-8 constitute a group and are argued in the section entitled Response to 1st Ground for Rejection.

Claims 4, 5, 9, and 10 constitute a group and are argued in the section entitled Response to 2nd Ground for Rejection.

Response to 1st Ground for Rejection

The Examiner contends that the teachings of independent claims 1 and 6 as well as dependent claims 2, 3, 7, and 8 can be found in the prior art by combining the Vanzant and Stewart et al. See 35 U.S.C. §103(a). references. More specifically, the Examiner states, *inter alia*, that the rigid base and cover of Stewart et al. can be combined with the inflatable bladder of Vanzant to arrive at the rigid base, inflatable bladder and cover of the present invention. See Office Action, pg. 2, (May 14, 2007). However, the Vanzant and Stewart et al. references are not combinable because the Vanzant device is wholly incompatible with the theory of operation of the Stewart et al. device, and would indeed produce an inoperable result. See McGinley v. Franklin Sports Inc., 262 F.3d 1339 (Fed. Cir. 2001); In re Sponnoble, 405 F.2d 578 (C.C.P.A. 1969) ("*references teach away from combination if the combination produces a seemingly inoperable device*").

The inflatable bladder of Vanzant is shaped in the nature of a chair, even in the fully deflated state, and directly contacts and conforms to the buttocks and back of a user. Accordingly, as the Vanzant bladder inflates, its shape changes from a relatively thin, chair-like profile having a generally level seat to a relatively thick, chair-like profile having a generally trapezoidal seat that shifts the user up and forward to a standing position. See Vanzant, Fig. 5a and 5b. Furthermore, compartments in the Vanzant bladder fill in a predetermined order so that the Vanzant bladder tends to cup the user's buttocks, which results in enhanced lateral stability.

In contrast the rigid base and cover of the Stewart et al. device operates in consort with one another through a set of scissor braces, which connect the base to the cover in an extendable/collapsible

relation. The base and cover of Stewart et al. enclose an expandable bladder having a generally rectangular top and bottom that are spaced apart and connected by accordion-like sides. Thus, the bladder of Stewart et al. is in the nature of a bellows. See Stewart et al., Fig. 1. A top surface of the bladder contacts the underside of the cover, and a bottom surface of the bladder contacts the base. Accordingly, as the bladder inflates it forces the cover away from the base. However, the cover is attached to the base by the scissor braces. Therefore, the cover is guided by the braces and thereby sweeps out an arced path such that the cover arrives at an oblique angle relative to the base. See Stewart et al. Fig. 7 compared to Stewart et al. Fig. 1. Thus, the user is shifted up and forward away from the base. Furthermore, the Stewart et al. device relies solely on the scissor braces for lateral stability. Without these, the cover (and user) would simply fall off.

While it may be straight forward to add a rigid base similar to that of Stewart et al. under the seat of the Vanzant device, there is no way to add the Stewart et al. cover with scissor braces to Vanzant without rendering Vanzant inoperable. See McGinley, 262 F.3d 1339. In order to separate the cover from the base Stewart et al. requires a vertically collapsible bladder capable of developing strength in a generally vertical direction upon inflation. Vanzant does not teach or suggest such a bladder, but rather discloses a bladder having a substantially fixed height that becomes thicker upon inflation. Accordingly, the combination of Vanzant and Stewart et al. would necessarily render an inoperable result. See Id.

Furthermore, in order to render the Vanzant bladder able to open a Stewart base and cover, it would need to be converted from a chair-like shape having a fixed height and variable thickness to a variable height bladder having any arbitrary thickness. Thus, its redesign would be so substantial as to change the basic principles under which the Vanzant bladder was designed to operate. See In re Ratti, 123 USPQ 349, 352 (C.C.P.A. 1959)(“ We hold, further, that the combination of Jepson with Chinnery et al. is not a proper ground for rejection of the claims here on appeal. This suggested combination of references would require a substantial reconstruction and redesign of the elements shown in Chinnery et al. as well as change in the basic principles under which the Chinnery et al. construction was designed to operate.”).

Still further, the cover of Stewart et al. is structurally and functionally distinct from the cover of the claimed invention. The Stewart et al. cover functions as a seat for a user, and as a carrying case. In contrast the cover of the claimed invention enables a smooth and comfortable inflation. More specifically, the cover of the claimed invention allows the bladder to unfold and expand under the user's buttocks. Whereas, in the absence of the cover, the bladder would tend to repeatedly stick to, and

break free from, the user's skin as it inflates, creating an uncomfortable condition. Thus, while the covers of the cited art and the claimed invention may share the same name, their structure and function are entirely different. Accordingly, the combination of Vanzant and Stewart et al. does not teach or suggest each and every element of the claimed invention and therefore cannot render the claimed invention obvious.

Finally, the clever design of the claimed invention obviates the need for the lateral supports of Vanzant and/or Stewart et al. Specifically, the cover of the claimed invention is operatively attached to the base. Accordingly, as a lateral force is applied the bladder begins to lean in the direction of the force; however, this motion causes tension in the cover, which effectively limits lateral motion. Thus the device, and therefore the user, is stabilized without the need for the added components that are required to stabilize the cited art. This inventive cover feature of the claimed invention is neither taught nor suggested by the cited art. Accordingly, the combination of Vanzant and Stewart et al. cannot render the claimed invention obvious.

Each of the foregoing arguments apply equally well to both independent claims 1 and 6, and therefore to claims 2, 3, 7, and 8 which depend from claims 1 and 6. Accordingly, each of the rejected claims is non-obvious, and the Appellant respectfully requests that the Board reverse the Examiner's rejection.

Response to 2nd Ground for Rejection

The Examiner has also rejected claims 4, 5, 9, and 10 under 35 U.S.C. §103(a) as being unpatentable over Vanzant in view of Stewart et al. as applied to claims 1-3 and 6-8 and in further view of US Patent No. 6,264,279 to Chow. More specifically, the Examiner contends that his first ground for rejection can be simply restated with the addition of a removable connecting means and a material to minimize slippage as disclosed by Chow. See Office Action, Pg. 4. (May 14, 2007). Accordingly, the Appellant's response to the first ground for rejection similarly defeats the second ground for rejection regardless of any disclosure by Chow of a connecting means and/or an anti-slip material. Claims 4, 5, 9, and 10 being dependent from claims 1 and 6 must be similarly non-obvious. Accordingly, the Appellant respectfully requests the Board to reverse this rejection as well.

VIII. CLAIMS APPENDIX

1. A portable air lifted seat apparatus comprising:

a rigid base;

a one-piece inflatable bladder positioned on the base comprising:

(i) a front portion, wherein the front portion is constructed to be rectangular;

(ii) a rear portion, wherein the rear portion is constructed to be rectangular and wherein the height of the rear portion on full inflation of the inflatable bladder is at least three times the height of the front portion;

(iii) first and second trapezoidal shaped side panels operatively connecting the front and rear portions;

a valve for inflation and deflation of the bladder, the valve operatively connected to one of the first and second side panels of the bladder;

a compartment located at one of the first and second side panels of the bladder and operatively connected to the base;

a rechargeable, self-contained air compressor for use in inflating the bladder, the air compressor positioned in the compartment;

a hose having first and second ends, wherein the hose is operatively connected to an output of the compressor at the first end and to the valve at the second end; and,

a cover positioned over the bladder and operatively connected to the base.

2. The portable air lifted seat apparatus of claim 1, wherein the front portion initially rises in unison with the rear portion.

3. The portable air lifted seat apparatus of claim 2, wherein the rear portion is approximately 7 inches higher than the front portion at full inflation.

4. The portable air lifted seat apparatus of claim 1, wherein the cover comprises;
a selectively removable connecting means so that the cover may be removed from the base and the bladder.

5. The portable air lifted seat apparatus of claim 4, wherein the top of the cover further contains material to minimize slippage.

6. A portable air lifted seat apparatus comprising:

a rigid base;

a one-piece inflatable bladder positioned on the base comprising:

(i) a front portion, wherein the front portion is constructed to be rectangular;

(ii) a rear portion, wherein the rear portion is constructed to be rectangular and wherein the height of the rear portion on full inflation of the inflatable is at least three times the height of the front portion;

(iii) first and second trapezoidal shaped side panels operatively connecting the front and rear portions;

a first valve for inflation of the bladder operatively connected to one of the first and second panels of the bladder;

a second valve for deflation of the bladder operatively connected to one of the first and second side panels of the bladder;

a compartment located at one of the first and second side panels of the bladder and operatively connected to the base;

a rechargeable, self-contained air compressor for use in inflating the bladder, the air compressor positioned in the compartment;

a hose having first and second ends, wherein the hose is operatively connected to an output of the compressor at the first end and to the first valve at the second end; and,

a cover positioned over the bladder and operatively connected to the base.

7. The portable air lifted seat apparatus of claim 6, wherein the front portion initially rises in unison with the rear portion.

8. The portable air lifted seat apparatus of claim 7, wherein the rear portion is approximately 7 inches higher than the front portion at full inflation.

9. The portable air lifted seat apparatus of claim 6, wherein the cover further comprises:

a selectively removable connecting means so that the cover may be removed from the base and the bladder

10. The portable air lifted seat apparatus of claim 9, wherein the top of the cover further contains material to minimize slippage.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

No related proceedings exist.

The foregoing arguments and evidence having established that the Examiner's rejections are improper and should be reversed, the Appellant respectfully requests that the Board reverse each rejection and allow the subject claims to issue.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. Thomson', with a long horizontal flourish extending to the right.

Daniel A. Thomson
USPTO Reg. No. 43,189
Attorney for Appellant

Emerson, Thomson & Bennett LLC
777 West Market Street
Akron, Ohio 44303

Phone: 330.434.9999
Fax: 330.434.8888